Hi Andy

Thanks for taking the time to talk to me yesterday afternoon, you asked me to put some of my questions/information in writing, and so I am doing so in this email. Your discussion was extremely helpful, and I hope that my questions/suggestions would prove helpful to the agency in developing this rulemaking. I think I can contribute because I was inside the government for 40 years, and had substantial exposure to these GW issues through SNAP and many years working with Cindy. (Say hi! To Cindy for me)

- 1. My first suggestion was for EPA to review the data that it did not review for the NODA, and explain why or how this data was not deemed useful, and/or not fully used in time for the proposal, if that is the case. This includes several categories:
 - A. CDR data. Which producers/importers represented in CDR that were not included in Subpart OO reporting for the NODA and/or proposal. (If I develop a list in the short term of such producers/importers, I plan to share with EPA perhaps within a week). Such an exercise would also include comparison of the figures in the two databases for the entities that did provide data in both.
 - B. ITC Data I didn't have this in time for the call but see Attachment #2 from the NARI NODA comments. See data available from ITC https://dataweb.usitc.gov. I know you said EPA was now looking at international data.
 - C. Subpart O Reporting data to capture HFC-23 data excluded from the NODA table. (also new information subsequent to our call).
 - D. Private Service data such as Datamyne.
- 2. My second suggestion was regarding providing additional transparency and possible additional certainty surrounding the net production numbers employed by EPA in the Table 3 provided in the NODA. Since the Table is based virtually entirely on the sum of CBI figures I suggested two possibilities, and said I may do more thinking about this.
 - A. Ensure that the figures that EPA uses corresponds with accurate data supplied by the entity-which would include verifying your figures with more current company supplied figures which may have been modified from the original reporting in 2011-2013 (correction of errors, for example). At a minimum, EPA should verify its figures with companies that constitute 90% or more of the totals.
 - B. This first procedure provides no transparency for the outside commenters, but it does provide some transparency for individual entities. I suggested perhaps aggregating the data by size and chemical into smaller cells, so that public commenters may have a better opportunity to identify possible errors. For example, one or two individual companies may realize that their own combined contributions exceed the quantities reported in a given cell. The US Census has substantial experience creating cells for additional transparency. Hopefully, this can be done in time for the proposal.

- 3. I believe that there may be HFOs that are HFC blends combined with other chemicals. Such chemicals, as I understand the law are not "regulated substances". However, it is possible that allocations could govern the production or consumption of such HFOs, under a possible interpretation of the AIM. So I have two questions: Are there such HFOs? With regard to HFC blends generally, can we assume that the HFC components would be subject to both production and consumption allocations?
- 4. What is the current thinking about setting aside allocations (consumption or production) for new entries? I understand EU and possibly Canada use these approaches.
- 5. I found these provisions in the Solvay comments for identifying the data to be utilized for establishing baseline components (the last two) using 1989 data. You suggested going to the UNEP website. Are these the equivalent? See below.

Second component is based on baseline consumption allowances of HCFCs. Official data are publicly available through the following link:

https://www.law.cornell.edu/cfr/text/40/82.19

Third, and last component, involves CFCs baseline consumption allowances. Official data is publicly available through the following link. Kali-Chemie Corporation is listed, which was acquired by Solvay in 1989.

https://www.law.cornell.edu/cfr/text/40/82.6

6. In particular, I highly recommend that EPA, at a minimum, provide supplemental information in the record after the proposal is issued, but during the open comment period, to obtain additional informed public feedback. This would also improve relations between industry and EPA, showing that EPA cares enough to get a better result.

I would be happy to talk to you in the near future about these issues. Thanks again for your help.

Best Kevin Bromberg Bromberg Regulatory Strategy, LLC 301-

Attachment 2 NARI Comment

Year of Import	HTSUS 2903.39 Imports from All Countries (kgs)	HTSUS 2903.39 Imports from the Peoples of Republic of China (kgs)	% of Imports From the Peoples Republic of China	HTSUS 3824.78.00 Imports From All Countries	HTSUS 3824.78.00 Imports From the Peoples Republic of China (Kgs)	% of Imports from the Peoples Republic of China	MTSUS 2903.39 & 3824.78.00 Imports from All Countries (kgs)	HTSUS 2903.39 & 3824.78.00 Imports from All Countries % increase from prior year	HTSUS 2903.39 & 3824.78.00 Imports from Peoples Republic of China (kgs)	HTSUS 2903.39 & 3824.78.00 Imports from Peoples Republic of China % increase from prior year
2009	21,053,364	17,348,881	82%	227,038	59,356	26%	21,280,402		17,408,237	
2010	40,148,371	34,198,346	85%	1,844,104	307,806	17%	41,992,475	97.33%	34,506,152	98.22%
2011	48,886,250	43,438,720	89%	2,226,500	852,210	38%	51,112,750	21.72%	44,290,930	28.36%
2012	49,322,588	44,477,385	90%	7,786,918	6,184,912	79%	57,109,506	11.73%	50,662,297	14.39%
2013	55,489,810	51,099,265	92%	11,634,596	10,724,866	92%	67,124,406	17.54%	61,824,131	22.03%
2014	52,567,253	45,631,267	87%	8,477,606	7,420,340	88%	61,044,859	-9.06%	53,051,607	-14.19%
2015	76,214,335	70,040,654	92%	21,028,682	18,027,888	86%	97,243,017	59.30%	88,068,542	66.01%
2016	66,234,936	56,547,312	85%	24,323,460	22,459,776	92%	90,558,396	-6.87%	79,007,088	-10.29%
2017	72,726,852	59,387,355	82%	18,685,248	12,445,964	67%	91,412,100	0.94%	71,833,319	-9.08%
2018	80,302,564	67,043,152	83%	15,113,248	9,853,530	65%	95,415,812	4.38%	76,896,682	7.05%
2019	82,765,312	66,191,037	80%	5,081,268	2,743,118	54%	87,846,580	-7.93%	68,934,155	-10.35%
Total 2009 th	645,711,635	555,403,374	86%	116,428,668	91,079,766	78%				

%increase %increase 412.81% 2019/2009 395.99% 2019/2009 PRC

There are two primary chapters of the Harmonized Tariff System of the United States (HTSUS) that cover the products associated with refrigerant known as hydrofluorocarbons (HFC). The United States imports single components from 43 separate countries. These imports can be reviewed under 2903.39.2005, 2903.39.2015, 2903.39.2030, 2903.39.2030, 2903.39.2045, 2903.39.2050. The finished blended HFC Refrigerants are imported from 22 countries. The blended, finished refrigerants are correctly imported under 3824.78.0000, 3824.78.0020, 3824.78.0050.

Data has been compiled from the International Trade Commission (ITC) https://dataweb.usitc.gov.